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REMARKS

Claims 1-20 were previously pending in this application. By this amendment, claim 1 has been amended to incorporate a portion of the subject matter of claim 4 and Figs. 2 and 3. Accordingly, claim 4 has been amended. No new matter has been added. Claims 1-20 remain pending.

Rejections Under 35 U.S.C. §102

Claims 1, 3, 7-14, 17, and 19-20 were rejected under 35 U.S.C. §102(b) as being anticipated by JP 61-167407 to Uchida et al. (hereinafter Uchida).

Uchida discloses a process for the production of a hollow-fiber filtration membrane module utilizing a cylinder 9 including side walls and bottom surface 12. (Uchida translation, page 4, third full paragraph and Fig. 2A.) The method includes installing holes 5 in the bottom surface 12 of the container 9, inserting rods or tubes 11 into the holes 5, and inserting hollow fibers 2 into the container 9 through the container opening. A cross-linking resin is added to the container, covering the bottom of the fibers 2, but not completely covering the rods or tubes 11. The rods/tubes are removed to form throughholes. (Uchida translation, page 3, last paragraph.)

Uchida fails to disclose, teach, or suggest a method comprising, in part, providing a mould for potting the membrane end, the mould comprising a base comprising an ejector portion and at least one formation for forming at least one opening in the membrane pot, and raising the ejector portion to demould the membrane pot. In contrast, the bottom surface 12 of Uchida does not include an ejector portion, and Uchida is also silent as to a demoulding step. As such, independent claim 1 is not anticipated by Uchida. Claims 3, 7-14, 17, and 19-20 depend directly or indirectly from claim 1 and are novel for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Rejections Under 35 U.S.C. §103

Claims 1-4 and 6-20 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 3,442,002 to Geary (hereinafter Geary) in view of Uchida.

Geary discloses a method of manufacturing a fluid separation apparatus. In Geary, a plurality of hollow filaments are placed in a tubular casing assembly 101, to which a mould unit

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905b is bolted to one end. (Geary, col. 21, lines 30-33.) A gasket is positioned between the casing assembly and the mold unit and the mold cavity surrounds the ends of the groups of filaments. The mold unit includes inlet means 908a which communicates with the mold cavity for the supply of the liquid molding material. (Geary, col. 21, lines 44-47.) During rotation of the casing assembly and attached mold, a solidifiable liquid is introduced into the mold cavity. (Geary, col. 21, lines 48-55.) The mould unit is removed from the cast wall, exposing the cast wall for further processing. (See Figs. 16 and 17.)

The proposed combination of Geary and Uchida would not have resulted in the invention as recited in amended independent claim 1. Geary fails to disclose, teach, or suggest, a method of providing a mould comprising a base comprising an ejector portion and raising the ejector portion of the base to demould the pot, as recited in independent claim 1. As noted above, Uchida also fails to disclose, teach, or suggest, a method comprising, in part, providing a mould having a base with an ejector portion and raising the ejector portion to demould the pot and, therefore, fails to cure the deficiencies of Geary. As such, independent claim 1 is patentable over Geary and Uchida, either alone or in combination. Claims 2-4 and 6-20 depend directly or indirectly from independent claim 1, and are patentable for at least the same reasons. Withdrawal of this rejection is, therefore, respectfully requested.

Dependent claim 5 was rejected under 35 U.S.C. 103(a) as being unpatentable over Geary in view of Uchida and further in view of U.S. Patent No. 5,531,848 to Brinda et al. (hereinafter Brinda).

Brinda discloses a method of manufacturing a hollow fiber cartridge by curing a fluid impermeable material with heat. However, Brinda fails to disclose, teach, or suggest, a method comprising, in part, providing a mould having a base with an ejector portion, and raising the ejector portion of the base to demould the pot. As noted above, neither Geary nor Uchida disclose, teach, or suggest, providing a mould having a base with an ejector portion and raising the ejector portion of the base to demould the pot. As such, Brinda fails to cure the deficiencies of Geary and Uchida with regard to independent claim 1. Claim 5, therefore, as it depends from claim 1, is patentable over the proposed combination of Geary, Uchida, and Brinda and withdrawal of this rejection is respectfully requested.

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Dependent claim 15 was rejected under 35 U.S.C. §103(a) as being unpatentable over Uchida. However, claim 15 depends indirectly from amended independent claim 1, which is novel and patentable over Uchida. As such, claim 15 is patentable for at least the same reasons.

Moreover, Applicants wish to direct the Examiner to the translation of Uchida at page 4, the fourth full paragraph, in which Uchida first inserts rods into the holes in the bottom surface of the container, then inserts the fiber bundles, after which an epoxy resin is added from the opening of the container. In contrast to the Examiner's assertion, the order of adding the fiber bundles and the curable potting material to a mold is not prima facie obvious, as evidenced by Uchida. Upon reading Uchida, one skilled in the art would have understood that the fibers in Uchida are positioned in the pot prior to the addition of the curable resin to simplify the uniform placement of the fiber ends. (Uchida translation, page 4, fourth full paragraph). As such, dependent claim 15, which recites that the mould is filled with a curable potting material prior to positioning the membrane ends in the mould is further distinguished over Uchida. Withdrawal of this rejection is, therefore, respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, reconsideration is respectfully requested. This application is now in condition for allowance; a notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' attorney at the telephone number listed below.

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If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 50/2762.

Respectfully submitted,
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Siemens Docket No.: 2004P87077US
LLA Docket No.: M2019-701440
Date: November 8, 2006

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